



TO: Mike Gaudet - ITC
FROM: Chris C. Stanford, P.E.
SUBJECT: Proposed Discharge Limits - ITC Deer Park
DATE: April 14, 2019
cc: Aileen Hooks & Molly Cagle - Baker Botts, LLP

As requested, I have reviewed the TCEQ's proposed list of effluent limitations and monitoring requirements for Outfall 002 at ITC's Deer Park Terminal.

Recommendations for which parameters on the TCEQ list should be monitored and which should be removed from the list are provided in Table 1. These recommendations are based on the following:

- Several compounds on the TCEQ list were duplicated. One of each of the duplicated compounds should be removed.
- Many of the compounds on the TCEQ list are already included in ITC's existing TPDES permit. The limits and monitoring requirements for those parameters are already sufficiently protective and reduced limits/additional monitoring are not necessary.
- I have reviewed the sampling data collected ITC from the ditch March 18-29th. The flow in the ditch at that time should be a worst-case representation of the water that is currently stored in the tanks.
 - All parameters that were monitored during that time which were never detected are proposed to be removed from the ditch.
 - Those parameters that were detected at least once in the ditch are retained on the list.
- For the remaining compounds which were not analyzed for as part of the ditch sampling, I am recommending the following:
 - Removal of those compounds which were not stored, used, or generated within the impacted tank farm. This includes pesticides, herbicides, chlorinated compounds, enterococci, as well as various other compounds.
 - Compounds which have the potential to be present are recommended for retention on the list. Specifically, this includes phenols, benzene containing compounds, cresols, and polycyclic aromatic hydrocarbons (PAHs).
- I also recommend the removal of TDS and chlorides from the list. The ditch which receives the effluent is tidally influenced. There is no reason to expect the discharge to contain levels of these compounds that would impact any of the receiving waters.

Table 2 provides my recommendations for the discharge limits for the compounds that remain on the monitoring list after implementing the above recommendations. The table also includes the limits for those compounds that were proposed by the TCEQ. I have the following concerns about the TCEQ proposed limits:

- Some of the proposed limits are based on the OCPSF effluent guidelines for discharges with biological treatment (40 CFR 414.91) and the TCEQ has proposed using the daily average concentrations from those guidelines as daily maximum limits. The standard approach is to apply the average concentrations as daily average limits and there is no need to deviate from that approach in this situation.
- In some cases, it appears that the TCEQ has proposed daily maximum limits based on the TRRP benchmarks. In many of those cases, they are using the chronic benchmark as a daily maximum limit. The benchmarks are intended to apply in the receiving in water itself, not to a discharge entering that stream. In addition, chronic benchmarks represent long term goals and as such are better suited as the basis for an average limit rather than a daily maximum limit
- As indicated in the attached table, there are numerous compounds with maximum limits that are not listed either in the TRRP standards or the Texas Surface Water Quality Standards. My review did not identify any standards or criteria adopted by the TCEQ that apply to these compounds.

A more appropriate approach for setting limits and monitoring requirements would be guided by the TCEQ's Implementation Procedures, the TSWQS and current TCEQ policies for industrial TPDES permits, all of which are carefully designed to be fully protective of human health, aquatic life and the food chain:

- Limits should be applied as both a daily average and a daily maximum in accordance with established procedures.
- For compounds which Texas has adopted surface water criteria, the limits would be calculated in accordance with the Implementation Procedures.
- For the compounds listed in 40 CFR 414.91, the daily average and maximum concentrations would be utilized.
- When the compounds are on the 40 CFR 414.91 list and there is an adopted criterion in the TSWQS, the more stringent of the two sets of limits would be utilized.
- Compounds which have no adopted criteria and for which there are no established treatment standards would be report only, which is consistent with TPDES permitting practices. The data that is collected could then be utilized to evaluate the discharge against the TRRP benchmarks or other TCEQ standards.

In regards to the sampling frequency, my recommendation would be sample these constituents three times per week. That is consistent with requirements for major industrial facilities. Sampling daily will be logistically very difficult and the additional data collected would not be of significant value.

Table 1
ITC Proposed Compound Monitoring List

Color Key:

Compound in white to be monitored

Parameter to be removed. Already in TPDES permit

Duplicate on TCEQ List. Parameter to be removed.

Not detected in ditch. Parameter to be removed.

No basis for monitoring given compounds known to be present onsite and in fire fighting water. Parameter to be removed.

No environmental significance. Parameter to be removed.

Parameter	Basis for Removal/Retaining	ITC Ditch Sampling Data ⁽¹⁾		
		No. Hits	Average (ppm)	Max (ppm)
Carbonaceous Biochemical Oxygen Demand 5-day	Already limited in TPDES permit. No need for additional limits			
Chemical Oxygen Demand	Already limited in TPDES permit. No need for additional limits			
Total Organic Carbon				
Oil and Grease	Already limited in TPDES permit. No need for additional limits			
Total Dissolved Solids	Discharge is to a tidally influenced ditch. There is no standard or concern with TDS in effluent.			
Chloride	Discharge is to a tidally influenced ditch. There is no standard or concern with chlorides in effluent.			
Perfluoro-n-octane Sulfonate				
Enterococci	Domestic sewage is not treated or discharged. ITC has requested removal of Outfall 102 - domestic plant was never installed.			
Cyanide	Already limited in TPDES permit. No need for additional limits			
Arsenic Total	Already limited in TPDES permit. No need for additional limits			
Cadmium	Already limited in TPDES permit. No need for additional limits			
Chromium, Hexavalent	Already limited in TPDES permit. No need for additional limits			
Chromium, Total	Already limited in TPDES permit. No need for additional limits			
Cobalt	Already limited in TPDES permit. No need for additional limits			

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Parameter	Basis for Removal/Retaining	ITC Ditch Sampling Data ⁽¹⁾		
		No. Hits	Average (ppm)	Max (ppm)
Copper, Total	Already limited in TPDES permit. No need for additional limits			
Lead, Total	Already limited in TPDES permit. No need for additional limits			
Mercury, Total	Already limited in TPDES permit. No need for additional limits			
Nickel, Total	Already limited in TPDES permit. No need for additional limits			
Thallium, Total	Already limited in TPDES permit. No need for additional limits			
Tin, Total	Already limited in TPDES permit. No need for additional limits			
Zinc, Total	Already limited in TPDES permit. No need for additional limits			
1,1,1,2-Tetrachloroethane	Chlorinated compound. Not present in the impacted tank farm.			
1,1,1 - Trichloroethane	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
1,1,2,2-Tetrachloroethane	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
1,1,2-Trichloro-1,2,2-trifluoroethane	CFC. Not present on site	None	0	0
1,1,2-Trichloroethane	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
1,1-Biphenyl	Detected in ditch	73	0.122	1.1
1,1-Dichloroethane	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
1,1-Dichloroethylene (1,1-Dichloroethene)	Chlorinated compound. Not present in the impacted tank farm.	None	0	0

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Parameter	Basis for Removal/Retaining	ITC Ditch Sampling Data ⁽¹⁾		
		No. Hits	Average (ppm)	Max (ppm)
1,1-Dichloropropene	Chlorinated compound. Not present in the impacted tank farm.			
1,2,3-Trichlorobenzene	Benzene compound			
1,2,3-Trichloropropane	Chlorinated compound. Not present in the impacted tank farm.			
1,2,4,5-Tetrachlorobenzene	Chlorinated compound. Not present in the impacted tank farm.			
1,2,4-Trichlorobenzene	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
1,2,4-Trimethylbenzene	Benzene compound, occurs naturally in petroleum			
1,2-Dibromo-3-chloropropane	Herbicide banned in US since 1979. Not present in the impacted tank farm.	None	0	0
1,2-Dibromoethane DUPLICATE	Duplicated on TCEQ list			
1,2-Dibromoethane (Ethylene Dibromide)	Organobromine compound. Not present in the impacted tank farm.	None	0	0
1,2-Dichloroethane	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
1,2-Dichloropropane	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
1,2-Diphenylhydrazine	No longer produced in the US. Not present in the impacted tank farm.			
1,2-trans-Dichloroethylene	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
1,3,5-Trimethylbenzene	Benzene compound			
1,3-Dichloropropene (1,3-Dichloropropylene)	Detected in ditch	1	0.09	0.09

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Parameter	Basis for Removal/Retaining	ITC Ditch Sampling Data ⁽¹⁾		
		No. Hits	Average (ppm)	Max (ppm)
2,2-Dichloropropane	Chlorinated compound. Not present in the impacted tank farm.			
2,2-Oxybis(1-chloropropane)	Duplicated on TCEQ list. This compound is the same as bis(2-chloroisopropyl)ether.			
2,4,5 Trichlorophenol		None	0	0
2,4,5- TP (Silvex)	Herbicide. Not present in the impacted tank farm.			
2,4,5 Trichlorophenol	Duplicated on TCEQ List			
2,4,6 Trichlorophenol	Already limited in TPDES permit. No need for additional limits	None		
2,4-Dichlorophenol	Detected in ditch	1	0.017	0.017
2,4-Dimethylphenol	Detected in ditch	61	0.022	0.072
2,4-Dinitrophenol		None	0	0
2,4-Dinitrotoluene	Detected in ditch	1	0.55	0.55
2,6-Dinitrotoluene	Detected in ditch	1	0.76	0.76
2-Butanone	Already limited in TPDES permit. No need for additional limits	16	0.566	0.82
2-Chloronaphthalene	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
2-Chlorophenol	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
2-Hexanone	Solvent. Not present in the impacted tank farm.	None	0	0
2-Methylnaphthalene	PAH.	96	1.12	17
2-Methylphenol DUPLICATE W/O-CRESOL	Duplicated on TCEQ list			
2-Nitroaniline		None	0	0
2-Nitrophenol		None	0	0
3&4-Methylphenol	Detected in ditch	52	0.045	0.23

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Parameter	Basis for Removal/Retaining	ITC Ditch Sampling Data ⁽¹⁾		
		No. Hits	Average (ppm)	Max (ppm)
3,3-Dichlorobenzidine	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
3,4-Benzofluoranthene	Detected in ditch			
3-Nitroaniline		None	0	0
4,4-DDD	Insecticide. Not present in the impacted tank farm.			
4,4-DDE	Pesticide. Not present in the impacted tank farm.			
4,4-DDT	Pesticide. Not present in the impacted tank farm.			
4,4-Isopropylidenediphenol (Bisphenol A) - NO STANDARD	Used in plastics. Not present in the impacted tank farm.			
4,6-Dinitro-2-methylphenol		None	0	0
4,6-Dinitro-O-cresol	Cresol			
4-Chloro-3-methylphenol	Detected in ditch	1	0.0031	0.0031
4-Chloroaniline	Detected in ditch	1	0.076	0.076
4-Methyl-2-pentanone	Detected in ditch	1	0.54	0.54
4-Nitroaniline		None	0	0
4-Nitrophenol		None	0	0
Acenaphthene	Detected in ditch	47	0.041	0.42
Acenaphthylene	Detected in ditch	75	0.087	0.88
Acetone	Already limited in TPDES permit. No need for additional limits	32	1.99	13
Acetophenone	Already limited in TPDES permit. No need for additional limits	11	0.035	0.077
Acrylonitrile	Not present in the impacted tank farm.			
Aldrin	Pesticide banned in 1974. Not present in the impacted tank farm.			

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Parameter	Basis for Removal/Retaining	ITC Ditch Sampling Data ⁽¹⁾		
		No. Hits	Average (ppm)	Max (ppm)
Ammonia Nitrogen	Already limited in TPDES permit. No need for additional limits			
Aniline	Not present in the impacted tank farm.			
Anthracene	PAH.	39	0.014	0.094
Antimony	No reason to expect it to be present in the impacted tank farm.			
Atrazine	Herbicide. Not present in the impacted tank farm.	None	0	0
Benzaldehyde		None	0	0
Benzene	Detected in ditch	101	45.3	250
Benzidine	Not present in the impacted tank farm.			
Benzo(a)anthracene	PAH. Detected in ditch	30	0.0054	0.043
Benzo(a)pyrene	PAH. Detected in ditch	20	0.0024	0.0045
Benzo(b)fluoranthene	PAH. Detected in ditch	19	0.0021	0.003
Benzo(k)fluoranthene	PAH. Detected in ditch	17	0.0012	0.0018
Benzoic Acid	Not present in the impacted tank farm.			
Benzyl alcohol	Solvent. Not present in the impacted tank farm.			
Bis(2-chloroethoxy)methane	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Bis(2-chloroethyl)ether	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Bis(2-chloroisopropyl)ether	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Bis(2-ethylhexyl)phthalate (Di(2-ethylhexyl)phthalate)	Already limited in TPDES permit. No need for additional limits	None	0	0

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Parameter	Basis for Removal/Retaining	ITC Ditch Sampling Data ⁽¹⁾		
		No. Hits	Average (ppm)	Max (ppm)
Bis(chloromethyl)ether	Chlorinated compound. Not present in the impacted tank farm.			
Bromobenzene	Organobromine compound. Not present in the impacted tank farm.			
Bromochloromethane	Organobromine compound. Not present in the impacted tank farm.			
Bromodichloromethane (Dichlorobromomethane)	Organobromine compound. Not present in the impacted tank farm.	None	0	0
Bromoform (Tribromomethane)	Organobromine compound. Not present in the impacted tank farm.	None	0	0
Butyl benzyl phthalate	Already limited in TPDES permit. No need for additional limits	None	0	0
Caprolactam	Detected in ditch	1	7.5	7.5
Carbaryl	Insecticide. Not present in the impacted tank farm.			
Carbazole	Already limited in TPDES permit. No need for additional limits	None	0	0
Carbon disulfide	Used in the manufacture of chlorinated compounds and polymers. Not present in the impacted tank farm.	None	0	0
Carbon Tetrachloride	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Chlordane	Pesticide. Not present in the impacted tank farm.			
Chlorobenzene	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Chlorodibromomethane (Dibromochloromethane)	Chlorinated compound. Not present in the impacted tank farm.	None	0	0

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Parameter	Basis for Removal/Retaining	ITC Ditch Sampling Data ⁽¹⁾		
		No. Hits	Average (ppm)	Max (ppm)
Chloroethane	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Chloroform (Trichloromethane)	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Chloromethane	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Chlorpyrifos	Pesticide. Not present in the impacted tank farm.			
Chrysene	PAH. Detected in ditch	19	0.0027	0.0042
cis-1,2-Dichloroethylene(cis and trans)	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
cis-1,2-Dichloroethylene	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
cis-1,3-Dichloropropene	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Cresols (Methylphenols)	Cresol			
Cyclohexane	Detected in ditch	68	0.92	7.3
Danitol (Fenpropathrin)	Pesticide. Not present in the impacted tank farm.			
Demeton	Pesticide. Not present in the impacted tank farm.			
Diazinon	Pesticide. Not present in the impacted tank farm.			
Dibenzo(a,h)anthracene	PAH.	None	0	0
Dibenzofuran		None	0	0
Dichlorodifluoromethane	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Dichloromethane (Methylene Chloride)	Detected in ditch	2	0.51	0.51

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Parameter	Basis for Removal/Retaining	ITC Ditch Sampling Data ⁽¹⁾		
		No. Hits	Average (ppm)	Max (ppm)
Dicofol (Kelthane)	Pesticide. Not present in the impacted tank farm.			
Dieldrin	Pesticide. Not present in the impacted tank farm.			
Diethyl phthalate	Plasticizer. Not present in the impacted tank farm.	None	0	0
Dimethyl phthalate	Insect repellent ingredient. Not present in the impacted tank farm.	None	0	0
Di-n-butylphthalate	Plasticizer. Not present in the impacted tank farm.	None	0	0
Dioxins/Furans(TCDD Equivalents)	By products of herbicide manufacturing and pulp & paper mills. Not present in the impacted tanks farm.			
Endosulfan I (alpha)	Pesticide. Not present in the impacted tank farm.			
Endosulfan II (beta)	Pesticide. Not present in the impacted tank farm.			
Endosulfan sulfate	Pesticide. Not present in the impacted tank farm.			
Endrin	Pesticide. Not present in the impacted tank farm.			
Epichlorohydrin	Chlorinated compound. Not present in the impacted tank farm.			
Ethylbenzene	Detected in ditch	101	2.2	10
Ethylene Glycol	Used in plastics and antifreeze. Not present in the impacted tank farm.			
Fluoranthene	Already limited in TPDES permit. No need for additional limits	41	0.0096	0.086
Fluorene	Detected in ditch	59	0.083	0.75

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		No. Hits	Average (ppm)	Max (ppm)
Guthion (Azinphos Methyl)	Pesticide. Not present in the impacted tank farm.			
Heptachlor	Pesticide. Not present in the impacted tank farm.			
Heptachlor Epoxide	Pesticide. Not present in the impacted tank farm.			
Hexachlorobenzene	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Hexachlorobenzene- DUPLICATE	Duplicated on TCEQ list			
Hexachlorobutadiene	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Hexachlorocyclohexane (alpha)	Pesticide. Not present in the impacted tank farm.			
Hexachlorocyclohexane (beta)	Pesticide. Not present in the impacted tank farm.			
Hexachlorocyclohexane (gamma) (Lindane)	Pesticide. Not present in the impacted tank farm.			
Hexachlorocyclopentadiene	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Hexachloroethane	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Hexachlorophene	Chlorinated compound. Not present in the impacted tank farm.			
Indeno(1,2,3-cd)pyrene	Detected in ditch	19	0.0014	0.0019
Isophorone	Detected in ditch	47	0.027	0.1
Isopropylbenzene	Detected in ditch	53	0.18	1.4
m,p-Xylene	Detected in ditch	101	11	61
Malathion	Insecticide. Not present in the impacted tank farm.			

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		No. Hits	Average (ppm)	Max (ppm)
m-Dichlorobenzene (1,3-Dichlorobenzene)	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Methoxychlor	Pesticide. Not present in the impacted tank farm.			
Methyl acetate		None	0	0
Methyl bromide (Bromomethane)	Organobromine compound. Not present in the impacted tank farm.	None	0	0
Methyl Chloride	Duplicate on TCEQ List (Chloromethane)			
Methyl Ethyl Ketone (2-Butanone)	Duplicated on TCEQ list			
Metyl Tertiary Butyl Ether	Detected in ditch	17	0.076	0.14
Methycyclohexane	Detected in ditch	85	1.01	13
Methylene bromide	Organobromine compound. Not present in the impacted tank farm.			
Methylnaphthalene	PAH.			
Mirex	Pesticide. Not present in the impacted tank farm.			
Naphthalene	Detected in ditch	101	2	29
n-Butylbenzene	Benzene compound			
n-Decane	Already limited in TPDES permit. No need for additional limits			
Nitrobenzene	used in lube oils	None	0	0
N-Nitrosodiethylamine	Gasoline additive			
n-Nitrosodimethylamine	Not present in the impacted tank farm.			
N-Nitroso-di-n-Butylamine	Not present in the impacted tank farm.			
N-Nitroso-di-n-propylamine		None	0	0

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		No. Hits	Average (ppm)	Max (ppm)
N-Nitrosodiphenylamine	Formerly used in rubber manufacturing. Not present in the impacted tank farm.	None	0	0
n-Octadecane	Already limited in TPDES permit. No need for additional limits			
Nonylphenol	Surfactant. Not present in the impacted tank farm.			
n-Propylbenzene	Organic solvent. Not present in the impacted tank farm.			
o-Chlorotoluene	Chlorinated compound. Not present in the impacted tank farm.			
o-Cresol	Already limited in TPDES permit. No need for additional limits	53	0.054	0.34
o-Dichlorobenzene (1-2 Dichlorobenzene)	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
O&G-DUPLICATE	Duplicated on TCEQ list			
o-Xylene	Detected in ditch	101	4.5	24
p-Chlorotoluene	Chlorinated compound. Not present in the impacted tank farm.			
p-Cresol (4-Methylphenol)	Already limited in TPDES permit. No need for additional limits			
p-Dichlorobenzene (1,4-dichlorobenzene)	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Pentachlorobenzene	Chlorinated compound. Not present in the impacted tank farm.			
Pentachlorophenol	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Phenanthrene	PAH. Detected in ditch	73	0.08	0.91
Phenol	Already limited in TPDES permit. No need for additional limits	48	0.052	0.32

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		No. Hits	Average (ppm)	Max (ppm)
Phosphate (as PO4)	Already limited in TPDES permit. No need for additional limits			
p-Isopropyltoluene	Used in manufacture of paint and furniture. Not present in the impacted tank farm.			
Polychlorinated Biphenyls	Not present in the impacted tank farm.			
Pyrene	PAH. Detected in ditch	51	0.017	0.083
Pyridine	Already limited in TPDES permit. No need for additional limits			
sec-Butylbenzene	Not present in the impacted tank farm.			
Selenium	Not present in the impacted tank farm.			
Silver	Not present in the impacted tank farm.			
Styrene	Detected in ditch	67	1.77	12
Sulfide	Already limited in TPDES permit. No need for additional limits			
tert-Butylbenzene	Benzene compound			
Tetrachloroethylene	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Toluene	Detected in ditch	101	9.2	49
BTEX, Total	Already limited in TPDES permit. No need for additional limits			
Total Organic Nitrogen	Already limited in TPDES permit. No need for additional limits			
Total Purgeable Halocarbons	Already limited in TPDES permit. No need for additional limits			

Table 1
ITC Proposed Compound Monitoring List

Color Key:

Compound in white to be monitored

Parameter to be removed. Already in TPDES permit

Duplicate on TCEQ List. Parameter to be removed.

Not detected in ditch. Parameter to be removed.

No basis for monitoring given compounds known to be present onsite and in fire fighting water. Parameter to be removed.

No environmental significance. Parameter to be removed.

Parameter	Basis for Removal/Retaining	ITC Ditch Sampling Data ⁽¹⁾		
		No. Hits	Average (ppm)	Max (ppm)
Total Suspended Solids	Already limited in TPDES permit. No need for additional limits			
Toxaphene	Insecticide banned in US in 1990. Not present in the impacted tank farm.			
trans-1,2-Dichloroethene	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
trans-1,3-Dichlorophopene	Chlorinated compound. Not present in the impacted tank farm.			
Tributyltin	Biocide used for paint. Not present in the impacted tank farm.			
Trichloroethylene (Trichloroethene)	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Trichlorofluoromethane	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Vinyl Chloride	Chlorinated compound. Not present in the impacted tank farm.	None	0	0
Xylenes, Total	Detected in ditch	101	15.5	85

Notes;

(1) Data collected in ditch downstream of impacted tank farm by ITC March 18-27, 2019

Table 2
ITC Proposed Discharge Limits

Parameter	TCEQ Proposed Daily Max (ppm)	Basis for TCEQ Limit	ITC Proposed Limits		Basis for Proposed Limits
			Daily Avg (ppm)	Daily Max (ppm)	
Total Organic Carbon	Report		Report	Report	No applicable standard
Perfluoro-n-octane Sulfonate	Report		Report	Report	No applicable standard
1,1-Biphenyl	3.52	Unknown. Not listed in TRRP tables	Report	Report	No applicable standard
1,2,3-Trichlorobenzene	0.171	Unknown. TRRP benchmark is for freshwater, not salt water	Report	Report	No applicable standard
1,2,4-Trimethylbenzene	0.217	Set to chronic saltwater benchmark for aquatic life	Report	Report	No applicable standard
1,3,5-Trimethylbenzene	3.05	Unknown. TRRP benchmark is for freshwater, not salt water	Report	Report	No applicable standard
1,3-Dichloropropene (1,3-Dichloropropylene)	0.029	40 CFR 414 daily average	0.029	0.044	Use limits based on 40 CFR 414.91
2,4-Dichlorophenol	0.039	40 CFR 414 daily average	0.039	0.112	Use limits based on 40 CFR 414.91
2,4-Dimethylphenol	0.018	40 CFR 414 daily average	0.018	0.036	Use limits based on 40 CFR 414.91
2,4-Dinitrotoluene	0.017	40 CFR 414 daily average	0.113	0.285	Use limits based on 40 CFR 414.91
2,6-Dinitrotoluene	0.03	40 CFR 414 daily average	0.255	0.641	Use limits based on 40 CFR 414.91
2-Methylnaphthalene	0.03	Set to chronic saltwater benchmark for aquatic life	Report	Report	No applicable standard
3&4-Methylphenol	9.31	Unknown	Report	Report	No applicable standard
3,4-Benzofluoranthene	0.023	40 CFR 414 daily average	0.023	0.061	Use limits based on 40 CFR 414.91
4,6-Dinitro-O-cresol	0.078	40 CFR 414 daily average	0.078	0.277	Use limits based on 40 CFR 414.91
4-Chloro-3-methylphenol	0.87	Unknown	Report	Report	No applicable standard
4-Chloroaniline	2.14	Unknown	Report	Report	No applicable standard
4-Methyl-2-pentanone	61.5	Unknown	Report	Report	No applicable standard
Acenaphthene	0.022	Unknown	Report	Report	No applicable standard
Acenaphthylene	0.022	40 CFR 414 daily average	0.022	0.059	Use limits based on 40 CFR 414.91
Anthracene	0.00018	Set to TRRP benchmark for chronic saltwater	0.022	0.059	Use limits based on 40 CFR 414.91
Benzene	0.037	40 CFR 414 daily average	0.037	0.136	Use limits based on 40 CFR 414.91
Benzo(a)anthracene	0.000025	Set to TRRP benchmark for fish only.	0.022	0.059	Use limits based on 40 CFR 414.91
Benzo(a)pyrene	0.0000025	Set to TRRP benchmark for fish only.	0.023	0.061	Use limits based on 40 CFR 414.91
Benzo(b)fluoranthene	0.000013	Set to TRRP benchmark for fish only.	Report	Report	No applicable standard
Benzo(k)fluoranthene	0.00013	Set to TRRP benchmark for fish only.	0.022	0.059	Use limits based on 40 CFR 414.91
Caprolactam	408	Unknown	Report	Report	No applicable standard
Chrysene	0.00252	Set to TRRP benchmark for fish only.	0.022	0.059	Use limits based on 40 CFR 414.91
Cresols (Methylphenols)	12.715	Set to daily average based on Textox calcs	12.715	26.901	Use Textox calculated limits
Cyclohexane	295	Unknown	Report	Report	No applicable standard
Dichloromethane (Methylene Chloride)	0.04	40 CFR 414 daily average	0.04	0.089	Use limits based on 40 CFR 414.91

Table 2
ITC Proposed Discharge Limits

Parameter	TCEQ Proposed Daily Max (ppm)	Basis for TCEQ Limit	ITC Proposed Limits		Basis for Proposed Limits
			Daily Avg (ppm)	Daily Max (ppm)	
Ethylbenzene	0.032	40 CFR 414 daily average	0.032	0.108	Use limits based on 40 CFR 414.91
Fluorene	0.022	40 CFR 414 daily average	0.022	0.059	Use limits based on 40 CFR 414.91
Indeno(1,2,3-cd)pyrene	0.000013	Set to TRRP benchmark for fish only.	Report	Report	No applicable standard
Isophorone	0.65	Set to TRRP chronic benchmark.	Report	Report	No applicable standard
Isopropylbenzene (Cumene)	8.44	Unknown. TRRP benchmark is for freshwater, not salt water	Report	Report	No applicable standard
m,p-Xylene	24	Unknown.	Report	Report	No applicable standard
Metyl Tertiary Butyl Ether	0.015	Set to TRRP benchmark for fish and water.	Report	Report	No applicable standard
Methylcyclohexane	157	Unknown	Report	Report	No applicable standard
Methylnaphthalene	0.00029	Unknown	Report	Report	No applicable standard
Naphthalene	0.022	40 CFR 414 daily average	0.022	0.059	Use limits based on 40 CFR 414.91
n-Butylbenzene	1.2	Unknown. TRRP benchmark is for freshwater, not salt water	Report	Report	No applicable standard
N-Nitrosodiethylamine	0.00287	Unknown	0.00287	0.00607	Use Textox calculated limits
o-Xylene	24	Unknown	Report	Report	No applicable standard
Phenanthrene	0.00362	Unknown.	0.00362	0.00766	Use Textox calculated limits
Pyrene	0.00024	Set to chronic saltwater benchmark for aquatic life	0.025	0.067	Use limits based on 40 CFR 414.91
Styrene	0.455	Set to chronic saltwater benchmark for aquatic life	Report	Report	No applicable standard
tert-Butylbenzene	1.4	Unknown. TRRP benchmark is for freshwater, not salt water	Report	Report	No applicable standard
Toluene	0.026	40 CFR 414 daily average	0.026	0.08	Use limits based on 40 CFR 414.91
Xylenes, Total	0.85	Set to chronic saltwater benchmark for aquatic life	Report	Report	No applicable standard